



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
04.02.2004 Bulletin 2004/06

(51) Int Cl.7: **H04L 12/24**

(43) Date of publication A2:
27.06.2001 Bulletin 2001/26

(21) Application number: **00310448.6**

(22) Date of filing: **24.11.2000**

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE TR**
Designated Extension States:
AL LT LV MK RO SI

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(30) Priority: **03.04.2000 US 541186**
22.12.1999 GB 9930427

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(54) **A method of managing one or more services over a communications network**

(57) Service providers such as Internet Service Providers (ISPs) and other communications service providers are faced with increasing management problems as use of their services becomes more popular. Service level agreements (SLAs) are typically drawn up between a customer such as an enterprise, and a service provider and these SLAs set out the definitions of the service that the provider agrees to give. Different classes of service such as premium rate and best effort services may be provided by service providers and this adds to management complexity. A formalised model or rep-

resentation system is described for representing information about services such as information from service level agreements and definitions of classes of service. This formalised model is then mapped onto a model of a communications network in order to determine a relationship between the services and the communications network. The determined relationship is then used to assist negotiation of service level agreements; to automatically generate configuration details to enable services provided on the network to meet SLA commitments; and to automatically configure operations support systems, such as fault and performance monitoring systems.

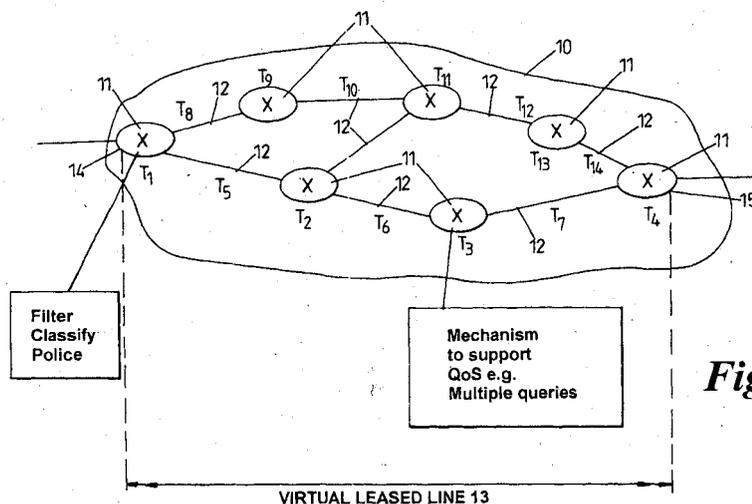


Fig. 1



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EUROPEAN SEARCH REPORT

Application Number
EP 00 31 0448

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	<p>BJOERKMAN N ET AL: "THE EMMA MULTIMEDIA CONFERENCE SERVICE" PROCEEDINGS OF ICICS. INTERNATIONAL CONFERENCE ON INFORMATION COMMUNICATIONS AND SIGNAL PROCESSING, XX, XX, September 1997 (1997-09), pages 1691-1695, XP002941275 * page 1691, left-hand column, line 13 - right-hand column, line 13 * * page 1692, left-hand column, line 1 - page 1693, left-hand column, line 9 * * page 1693, right-hand column, line 21 - page 1694, left-hand column, line 19 * * page 1695, left-hand column, line 1 - line 12 *</p>	1,2, 15-17	H04L12/24
Y	<p>* figures 1,2 * ---</p>	3-14	
Y	<p>MICHAEL LANGER ET AL: "Customer service management: Towards a Management information base for an IP connectivity service" PROCEEDINGS IEEE INTERNATIONAL SYMPOSIUM ON COMPUTERS AND COMMUNICATIONS, XX, XX, 6 July 1999 (1999-07-06), pages 149-155, XP002162704 * page 149, left-hand column, line 1 - right-hand column, last line * * page 150, right-hand column, line 15 - page 152, right-hand column, last line * * page 153, right-hand column, line 40 - page 154, left-hand column, last line * * figures 1-3 * --- -/--</p>	3-8, 10-12,14	<p>TECHNICAL FIELDS SEARCHED (Int.Cl.7) H04L</p>
The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 12 December 2003	Examiner Cankaya, S
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03/82 (P04/C01)



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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
Y	<p>LANGER M ET AL: "An ODP enterprise specification of customer service management for connectivity services" ENTERPRISE DISTRIBUTED OBJECT COMPUTING CONFERENCE, 1999. EDOC '99. PROCEEDINGS. THIRD INTERNATIONAL MANNHEIM, GERMANY 27-30 SEPT. 1999, PISCATAWAY, NJ, USA, IEEE, US, 27 September 1999 (1999-09-27), pages 94-103, XP010351702 ISBN: 0-7803-5784-1</p> <p>* page 94, left-hand column, line 1 - last line *</p> <p>* page 96, left-hand column, line 33 - page 97, left-hand column, last line *</p> <p>* page 101, left-hand column, line 36 - last line *</p> <p>* figures 3,4 *</p> <p style="text-align: center;">-----</p>	9,13	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
MUNICH		12 December 2003	Cankaya, S
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>& : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03.02 (P04C01)